

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Use of Spectrum Bands Above 24 GHz For)	GN Docket No. 14-177
Mobile Radio Services)	
)	
Amendment of Parts 1, 22, 24, 27, 74, 80, 90,)	WT Docket No. 10-112
95, and 101 To Establish Uniform License)	
Renewal, Discontinuance of Operation, and)	
Geographic Partitioning and Spectrum)	
Disaggregation Rules and Policies for Certain)	
Wireless Radio Services)	
)	

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”)¹ submits these comments in response to the *Third Further Notice of Proposed Rulemaking* (“*Third FNPRM*”) in the above-captioned proceedings, in which the Federal Communications Commission (“FCC” or “Commission”) seeks comment on additional millimeter wave (“mmW”) spectrum bands, including the 26 GHz, 37 GHz, 42 GHz, and 50.4-51.4 GHz bands.²

CCA applauds the Commission for inviting further discussion on ways to make additional mmW spectrum available for 5G use. The Commission should continue to free up

¹ CCA is the leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 subscribers to regional and national providers serving millions of customers. CCA also represents associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain.

² *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Third Report and Order, Memorandum Opinion and Order, and Third Further Notice of Proposed Rulemaking, GN Docket No. 14-177, et al., FCC 18-73 (rel. Jun. 8, 2018) (hereinafter, the Third Report and Order and Memorandum Opinion and Order will collectively be referred to as “*Order*” and the Third Further Notice of Proposed Rulemaking will be referred to as “*Third FNPRM*”).

additional spectrum resources for licensed mobile wireless use and continue its efforts to auction such spectrum as soon as possible, consistent with the Chairman’s proposal to simultaneously auction the 37 GHz, 39 GHz, and 47 GHz bands.³ In addition to these worthwhile efforts, opening up additional bands, such as the 26 GHz and 42 GHz bands, for wireless broadband will help continue the deployment of critical wireless services to all consumers. Competitive carriers need access to a variety of spectrum resources to deploy next-generation mobile broadband technologies, including to support the Internet of Things (“IoT”) and 5G. Access to mmW spectrum, in particular, will determine the viability of these carriers as networks move into the next-generation and consumers’ demand for data increases.

In addition, the Commission should continue to act in future phases of this proceeding to free up further spectrum in bands not specifically dealt with in the *Third FNPRM*, to make as much spectrum available as quickly as possible. Specifically, the Commission should consider making all, or a portion thereof, the 23.15-23.6 GHz band, the 31.8-33.4 GHz band, the 42.5-43.5 GHz band, and the 45.5-47 GHz band available for next-generation and 5G technologies.

I. THE COMMISSION SHOULD MAKE THE 42 GHz BAND AVAILABLE FOR MOBILE USE ON AN EXCLUSIVE LICENSED BASIS

CCA supports the Commission’s tentative conclusion that its Part 30 rules “provide the best opportunity to provide commercial wireless broadband services to the public” in the 42 GHz band.⁴ Numerous commenters, including T-Mobile, Qualcomm, Intel and Samsung, underscore on record that flexible use will provide the best opportunity to allow individual licenses to shape

³ See, Ajit Pai, *Coming Home*, FCC BLOG (July 11, 2018, 1:35 PM), <https://www.fcc.gov/news-events/blog/2018/07/11/coming-home> (“I’m excited to announce my plan to move forward with a single auction of three more millimeter-wave spectrum bands—the 37 GHz, 39 GHz, and 47 GHz bands—in the second half of 2019.”).

⁴ *Third FNPRM* ¶ 52.

the nature of services they will provide.⁵ What’s more, the Commission notes that the “ability to use this band together with the existing 37 GHz and 39 GHz bands, the international consideration of this band for mobile use, and the availability of 500 megahertz of unassigned spectrum all support our conclusion that this band is suitable for flexible use.”⁶

CCA therefore encourages the Commission to focus on licensed use for this band, rather than unlicensed use.⁷ Although unlicensed services play an important role in the wireless ecosystem, the FCC should build upon its good work to allocate licenses for mobile use through this proceeding. As CCA has previously noted, “[i]ncorporating unlicensed use into newly-unleashed mmW bands would devalue and discourage interest in use of this spectrum; parties paying for spectrum at auction are not eager to assume new unlicensed ‘partners.’”⁸ Further, the Commission has already released a 14-gigahertz segment of contiguous spectrum available for unlicensed devices pursuant to the *Report and Order*, thereby further highlighting the need to allocate additional spectrum for flexible mobile use.⁹ Accordingly, before the Commission releases more spectrum for unlicensed use, it should evaluate how the current market of unlicensed spectrum is being deployed.¹⁰ If the Commission does allow for unlicensed use in

⁵ *Id.* ¶ 49.

⁶ *Id.* ¶ 52.

⁷ *Id.*

⁸ See, CCA Comments in Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, GN Docket No. 14-177, et al., *Report and Order and Further Notice of Proposed Rulemaking*, FCC 16-89 at 8-9 (rel. July 14, 2016) (“*Report and Order*”).

⁹ *Report and Order* ¶125.

¹⁰ The Commission also should reject the use of sharing technologies such as spectrum access systems or use-it-or-share it approaches for this band. As CCA has noted previously, such models will likely not result in beneficial sharing of the upper mmW bands and will severely under value such bands. In addition, before adopting a SAS model for bands considered in this proceeding, the Commission must first assess the SAS framework once it has been implemented in the 3.5 GHz band. CCA Comments at 5 to *Report and Order*.

this band, CCA urges the FCC to propose a framework for the re-auction, or repurpose of, unlicensed spectrum in the event such spectrum lies fallow.

Moreover, the Commission should reject proposals to add federal fixed and mobile allocations into this band.¹¹ To this point, there is no apparent need for federal operations in this band – and further, to CCA’s knowledge, there has been no request by federal agencies for access to this spectrum. Adding new federal allocations would contradict Congress’ goal to encourage federal users to prioritize efficient spectrum use and vacate bands as appropriate to increase spectrum availability for commercial use.

Lastly, consistent with its proposals for the Upper 37 GHz, 39 GHz and 47 GHz bands, the Commission should license the 42 GHz band in five 100 MHz blocks. CCA agrees with the Commission that this size is “consistent with developing industry standards that maximize spectral efficiency, all the while permitting interested parties to aggregate these channels should they desire larger bands.”¹² What’s more, sufficient spectrum license sizes allow competitive carriers further access into the equipment ecosystem, and ensure carriers can efficiently build out their network footprints.

II. THE 26 GHz BAND SHOULD BE MADE AVAILABLE FOR MOBILE WIRELESS USE

CCA agrees with the Commission’s assessment that the 26 GHz band could be suitable for flexible fixed and mobile use.¹³ International momentum surrounding the allocation of this band continues to increase,¹⁴ and the time is ripe for the Commission to proceed with adopting

¹¹ *Third FNPRM* ¶ 53.

¹² *Id.* ¶ 57.

¹³ *Id.* ¶ 78.

¹⁴ *Id.* ¶ 76.

an appropriate framework for this spectrum. Indeed, when coupled with the 24 GHz and 28 GHz bands, classifying the 26 GHz band for flexible fixed and mobile use would allow for a tremendous amount of mmW spectrum to potentially be covered by a single radio.¹⁵ Accordingly, the Commission should proceed to allocate this band on a Partial Economic Area (“PEA”) basis in 100 MHz blocks, consistent with other mmW bands.¹⁶

Further, the Commission should adopt measures that foster the greatest amount of commercial use of the 26 GHz band with specific, narrowly-tailored protections for existing federal users. CCA agrees with the Commission that “the nature of the technology apt to be used in this region of the spectrum is likely to enable sharing using such techniques as geographic separation, highly directional antennas, and taking advantage of the relatively high path losses to enable operation in close proximity.”¹⁷ Moreover, any future federal use of the band should be allowed only to the extent such operations do not interfere with new commercial operations.¹⁸ Accordingly, the Commission must structure a framework for this band that promotes commercial wireless use. CCA urges the Commission to work closely with expert federal agencies, like the National Telecommunications and Information Administration (“NTIA”), to enable commercial wireless use of the 26 GHz band, while still preserving the ability of federal users to develop and deploy new technologies in the band on a limited basis.

¹⁵ *Id.* ¶ 77.

¹⁶ *Id.* ¶¶ 89-92.

¹⁷ *Id.* ¶ 84.

¹⁸ The Commission should reject speculative proposals that suggest that UMFUS not be authorized in the 26 GHz band. *See, Third NPRM* ¶ 85. Proven wireless technologies are more likely to accelerate the deployment of additional and faster broadband services.

III. THE COMMISSION MUST ADOPT A FRAMEWORK FOR THE LOWER 37 GHz BAND THAT PROMOTES CERTAINTY FOR BOTH FEDERAL AND NON-FEDERAL USERS

CCA supports the Commission's efforts to promote innovation in the Lower 37 GHz band. However, the current structure proposed in the *Third FNPRM* may not be the most appropriate way forward to promote certainty for both federal and non-federal users. Rather, the Commission should adopt a framework to support more certain access to spectrum for all stakeholders, to allow for more efficient, ubiquitous, and effective deployment strategies in the band. Accordingly, CCA supports the Commission's proposal to further develop the record regarding the best coordination mechanism for this band. As the Commission reviews different frameworks, it must remember the cornerstone goal to make available as much spectrum for commercial use and broadband deployment as possible, in a manner that promotes certainty and investment by commercial carriers.

Regarding non-federal use, any rules adopted by the FCC should be prioritized to accommodate flexible use of the spectrum, including mobile operations. To that end, the FCC should adopt measures to ensure that licensees have as much certainty of use as possible; this will encourage investment, provide certainty for returns on capital, and encourage broadband deployment. Accordingly, the Commission should consider the following framework for the Lower 37 GHz band.

First, licensees must be authorized for a geographic area of operation that will allow them to install equipment, such as base stations, and associated customer units. This approach is consistent with the Commission's usual designation of commercial spectrum. Meaningful protection is a prerequisite to support mobile operations for non-federal users. In addition, any coordination mechanism, whether between two or more non-federal entities or between federal

and non-federal entities, must have suitable interference protection criteria that are based on sound and well-founded engineering practices. Both federal and non-federal users should be required to employ the same criteria to demonstrate that there will be no harmful interference to existing operations, if such protection is afforded, for new installations of equipment.

Further, the Commission seeks comment on “how best to accommodate coordination zones for future federal operations at a limited number of additional sites” in the 37 GHz band.¹⁹ Any future federal operations should be considered based upon demonstrated need, and coordination zones should be narrowly tailored to protect necessary operations. Similarly, the Commission, in consultation with NTIA, should establish clearly-defined requirements for federal use in the Upper 37 GHz band.

IV. THE 50.4-52.6 GHz BAND SHOULD BE AUTHORIZED FOR MOBILE USE

While the Commission notes that licensing fixed and mobile services in the 50.4-52.6 GHz band remains an open issue in this proceeding,²⁰ it proposes to permit licensing of individual earth stations in the 50.4-51.4 GHz band using the same criteria applicable to the 24.75-25.25 GHz band.²¹ In addition to other available mmW bands, CCA urges the Commission to allocate this band for mobile use.²² As noted above and previously on record in this proceeding, sharing frameworks for mmW continue to be implemented and tested. The Commission should not prejudice future mobile use of the spectrum by adopting rules that cannot be reevaluated in the future.

¹⁹ *Id.* ¶ 74.

²⁰ *Id.* ¶ 94.

²¹ *Id.*

²² At the same, the FCC should make clear that any actions taken prior to this explicit allocation will not limit future mobile use of the band.

V. MOBILE SPECTRUM HOLDING POLICIES MUST PROTECT AGAINST ANTI-COMPETITIVE ACTIONS IN THE mmW BANDS

The Commission seeks comment on whether to impose a pre-auction limit on the amount of spectrum in the 26 and 42 GHz bands, and whether to include relevant portions of the 26 GHz and 42 GHz bands in its mmW spectrum threshold for reviewing secondary market transactions.²³ CCA previously discouraged the Commission from eliminating bright-line, pre-auction limits on mmW bands, as a mechanism to curb anti-competitive spectrum aggregation.²⁴ However, in the wake of the Commission’s recent decision to eliminate the pre-auction limit of 1250 megahertz for the 28 GHz, 37 GHz, and 39 GHz bands,²⁵ it must apply a stringent case-by-case review to the initial licensing of mmW spectrum post-auction, and to all proposed secondary market transactions regarding such spectrum. This approach would allow for divestitures to address potential competitive harms associated with that review. It also is necessary to prevent the dominance and spectrum aggregation of the two largest carriers. The Commission should take a holistic review of the market whenever spectrum is being transferred or allocated to identify and mitigate potential anti-competitive consequences.

As CCA has explained, unique harms would result if the Commission fails to protect 5G “competition from the outset.”²⁶ Competitive carriers’ efforts to develop and deploy 5G networks – many of whom already have begun testing – will be stifled if access to essential

²³ *Id.* ¶¶ 94-96.

²⁴ *See*, CCA Comments to *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, GN Docket No. 14-177, et al., FCC 17-152 at 5-7 (rel. Nov. 22, 2017)

²⁵ *Report and Order* ¶ 32.

²⁶ *Id.* ¶ 29 (2016); *see also* Competitive Carriers Association Petition to Deny the Verizon/Nextlink Application, ULS File No. 0007765708, at 13-16 (filed June 26, 2017).

mmW spectrum resources is undermined by the two largest carriers. mmW spectrum is especially important to many rural carriers' operations and their ability to access an equipment ecosystem to expand 4G deployments in the transition to next-generation technologies, IoT, and ultimately, 5G. The Commission must maintain strong mechanisms to prevent the two largest carriers from hindering the investments and operations of competitive carriers by amassing significant spectrum holdings.

VI. CONCLUSION

For the forgoing reasons, the FCC should adopt proposals set forth in the *Third FNPRM* to promote competition and innovation in mmW spectrum bands, as detailed herein.

Respectfully submitted,

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